Contents

1. *Everything is like everything in some respect.*

This may not be the first thing you think of when you think of likeness, but it is usually the second. First there is an immediate spark, "this—like—that." Likeness strikes and wakes you, if only for a moment, from your ontological slumber. The strike expresses itself in an awkward syntagm: "This here like that there." Suddenly and without warning, a far thing comes close. The world gets edited, a gap gets spliced out, one character shimmies up to another. A thing, distant in space from another thing, overlaps with the other thing in one or more of its qualities. After the first impact of a likeness, though, whenever you should consider the matter further, if you take even one further step toward the phenomenon, thinking through its ramifications or its potential origins, you arrive at a realization. Everything is like everything in some respect. Upon arriving at this premise, it becomes much easier to dismiss likeness as a principle. The premise is much too general to be useful—it seems to say "It's all about the same." "Nothing stands out." As if to confirm this, when I want to say that something is totally unique, I say, "the likes of which I never saw," which means, conversely, everything else would be the likes of which I have seen, many times over.

Where you can go from this most general premise is unclear, if already at the very beginning of an inquiry into likeness you are stuck in the perspective of everything. What can be learned from such a position, which is all positions and no position at all? "Everything" says a lot, and saying so much, it says very little. The premise that

everything is like everything in some respect seems empty or nearly empty, since on first hearing, it sounds like a merely descriptive statement. It sounds like: given time enough and energy enough, if you sorted painstakingly through everything there is, you would find that each thing in the universe is like every other thing in at least one way, and often probably more. And the more likenesses you catalog, the harder it becomes to distinguish anything from anything. An experiment in indistinction — nothing escapes the leveling, dulling gauze of similarity.

The expanded premise, everything is like everything, is not only a reference to a set of things, however; it also carries a specific sense. A difficulty lies in the semantics of the premise; an opaque spot makes it hard to connect its sense to the idea it is supposed to give sense to. "Is like" is never really said of everything altogether in its generality; it is said of something specific in its specificity. Likeness characterizes the detail — concrete, empirical, particular — and since no detail is specified in the general premise, therefore no trait is concretized, perceived, or singularized in the phrase "Everything is like everything in some respect." Insofar as it refers to any and all details, the phrase refers to none in particular and thus does not correspond to the sense of likeness.

This dilemma is worth unfolding. A single detail blocks out the All, but the All blocks out every single detail. Because it addresses "everything," the premise denies that there are details, whose existence as details, that is, as not general, is what allows likenesses to form in the first place. Another way to say this is that a likeness world cannot be described with the word "everything." Even if it were demonstrably true, even if you had time enough, if somehow you could show that the proposition "Everything is like everything in some respect" held, a description this general would fail its object, which is unfailingly specific, concrete, empirical, and temporally limited each time it happens. Further, if you did go one by one through all the phenomena, you would also find, beyond the incommensurability of the detail with the All, a huge, if not infinite set

of unexpected juxtapositions. Likenesses need not be restricted to categories familiar to us. If everything is like everything, given that this phrase makes any sense at all, one butterfly is like another butterfly, no doubt, and it is also true that an elephant is like an atom bomb, a praying mantis like a lover, a word like an object — strangeness blooms in likeness's garden. And yet the strange is soon pruned. Where it describes a potential infinity of peculiar partners, the premise, everything is like everything in some respect, comes to look banal. Where the likeness of an elephant to an atom bomb can be counted as one among a pleroma of likenesses, strangeness gets flattened into normalcy, irregularity into regularity. In turns, then, banal, absolutely detailed, and indeterminate, the premise is also often, under a slightly different perspective, self-evident. It makes immediate intuitive sense that everything should be like everything in some respect, and like other immediate intuitions, it offers little information. It tells you what you already know.

You are like your parents — hardly worth the breath to say it, a self-evident truth and a piece of cultural knowledge no one would think to question — with an even more peculiar and less remarked upon addendum that your parents are like their parents, and so on. In truth, there are as many instances of this self-evident fact as there are new generations; each level adds little information to the initial flat truth. Right there where it is like its progenitor, the new generation is not new. Likeness is the not new in the new, which is to say again, it is a phenomenon of little information. Now more than ever, this type of low-information phenomenon needs to be studied.

Another example lies even closer to home and more deeply embedded in our cultural understanding. A butterfly is like a butterfly — this may be the definition of self-evidence, a tautology or a mere identification. The definition has its complexities — this kind of sentence may serve two distinct semantic functions. As Gertrude Stein's favorite sentence does — "A rose is a rose is a rose" — it may indicate a vivid, singular experience, not comparable with any other, the most incomparable phenomenon that can only be named, never

explained. A rose is unlike anything other than itself, and refuses paraphrase. Or it may serve just as easily to indicate a complete mundanity and total uniformity. A rose is not in any way unlike itself, a rose uniformly rose—nothing new in it and never will be. Further, every rose is uniformly rose.

How to reconcile these two meanings, the most singular singularity and the most general generality? Like any being, a butterfly is totally unique and purely general at the same time, a paradox that philosophical millennia have yet to dissolve. It is butterfly, nothing but butterfly, all butterfly and purely butterfly—absolutely like itself, and in being absolutely like itself, there is nothing else that it is like. If something else were this much like it, it would be subsumed into the butterflies and lose its distinction. It would lose its distinction and become a butterfly, which, it is understood, is indistinct with respect to itself.

It hardly counts as knowledge to say that a butterfly is like itself, and no more so to say this butterfly is like that butterfly. Knowledge is when we say: this butterfly is a nymphalid whose habitat stretches from Japan to India. Knowledge is when we use Latin, *Kallima inachus*, when we move the locus of distinction to the genus. Knowledge is when we add a description that holds in all cases: in the dry season, *Kallima* behaves in the following way. It flutters, appearing to fall onto a tree branch, where, when its wings are closed showing their brown undersides, it is the spitting image of a dead leaf. When you want knowledge, avoid the obvious, the banal, the detail poor, and the indistinct—and that also means avoid what is too much like what you already know, both what is too like itself or too like every other. Old knowledge is already no longer knowledge. At just this point, at the point of deep habituation or almost perfect likeness of one moment or one entity to the next, the nearest, oddities begin to emerge. Within banal, almost uniform, old, obvious knowledge, blossoms the bizarre.

So it is with *Kallima*: a butterfly may be like itself and also like a leaf.[1] This would be a category error if we didn't first tame the

suggestion by giving it an official name, "mimicry," a purpose, "anti-predator adaptation," and an etiology, natural selection — all of which purportedly belong to the butterfly and not to the leaf, making the likeness into a semblance and thereby changing the category from a homeotic to an ontological one. A mimic is a semblance of another being, not its sibling or clone or child. Suspend for a moment, however, the will to being, cause, purpose, and name. Take the statement on its face. This is often the best way to find/make likenesses, to take statements on their face. Butterfly and leaf are alike; they enliken one another. From this position, other potential likenesses suggest themselves. Take a bumblebee, a school bus, and a journalist. They are alike in yellowness. Alike in carrying and transmitting important things. Alike in punishing you when you misbehave. In one light, the resemblance of the radically nonsimilar is encompassed by the premise, everything is like everything in some respect. At first dull, banal, and so on, the premise turns interesting again. Where is the limit to its extension? What phenomenon, real or imagined, ideal or material, will not be touched by it? The premise leads you down strange alleyways, to wild gardens of mismatched and antithetical things; and nevertheless, when you extend the strings of unexpected likenesses out to infinity, in order to encompass truly everything, no matter how strange they seem at first glance, heaped together in a virtually horizonless scape, again the world comes to seem flat, features vanish into indistinction, and the strange dissolves back into the ordinary.

Out of this effect you could formulate a rule, one that points to a contradiction to be analyzed more carefully later. The more striking a likeness, the farther it will spread out along its pathways, pulling more and more phenomena into its purview; the farther it spreads out, the closer it comes to generality; the closer to generality, the less striking any single likeness seems; the less striking any single likeness seems, the less like likeness the phenomenon becomes and the more like indeterminacy or even sameness. Likeness, from a far perspective, presents a self-diminishing tendency. From bumblebee, school bus, and journalist, we could, for instance, move to a string

of all yellow things, including all things said to be yellow, like journalists but also like cowards, and then we could move further on to the string of all colored things, and then to the delirious series of all colored and uncolored things that are alike in being colorable, and so on — until in the end, once again, we have very little information.

Between a banality of sameness and a delirium of difference likeness likes to hide. This may well have been the problem it posed to theory all along, from the time of the earliest European ontologies up to empiricism and current scientism. When other fundamental phenomena are around, likeness hides. The basis for this is that you cannot tell whether it tends toward uniformity or toward difference. It is not different enough from uniformity to be picked up by epistemic frameworks. The question underlying the tension or confusion that likeness suffers, caught between difference, tending toward absolute difference, and uniformity, tending toward absolute uniformity, is this one, I believe: are likenesses all alike? This question is really asking whether there is one special quality called "likeness," that is shared out equally among like things or, on the other hand, whether you can identify anything unique about likeness at all. Is likeness a distinct mode, or does it name something that participates in all modes and in which all modes participate?

When you say everything is alike, you see the world as sunk into an undifferentiated, homogeneous gel. When you affirm "Everything is like everything," the premise may therefore repulse you, as though likeness were an invitation to indifference, an excuse for mysticism or depression unto death. With regard to difference and sameness, you can take the premise in two ways. That everything is like everything in some respect could mean all things are alike in a similar way. This picture is gray. Like a cloud on a cloudy day in a month of rain, it depresses our faculties. The premise, however, does not say "Everything is like everything in the very same respects." Nor does it say everything is alike in one single respect, as would be the case with substance ontology. Assume the respects in which everything is alike are multiple. Multiple respects, multiploid likenesses — one thing

could then be like many others in various of its (and their) respects. This picture is motley. Like a shapely cloud among multiform clouds in a blue sky, it may invigorate us. How can the decision be made between the two pictures, gray and motley, depressing and invigorating? This may be the biggest problem for the initial stage under the force of the preliminary premise.

To see the conflict more vividly, take the case of what evolutionary biologists call "mimicry." A butterfly is like a leaf. It must be conceded that the leaf that the butterfly is like is also like another leaf. And so it must be asked: are the two likenesses, butterfly-leaf and leaf-leaf, alike? Yes and no. Are the respects in which butterfly is like leaf the same as those in which leaf is like leaf? Yes, and again, no. Things don't become less complicated here. Look at one aspect of the organism, the undersurface of *Kallima inachus*'s wings. In the dry season, the wing underside can be called "brown," as can the leaf; indeed all the leaves around it can be called "brown" as well (Figure 1). Are these browns the same brown? In part, no — because color in nature is not a pointlike datum, but a mottled, marbled, or streaked group of overlapping stains, as unlike as alike, spreading over an expanse, over wing, up and down leaf, through the patina of another leaf and another, such that the color name "brown" is first a nominal designation and second also a wish for uniformity in an object. "Brown" is an approximation for the purposes of classifying beings, a comparison to an ideal standard. Here is a good moment to note what will be emphasized again later — that a name and a phenomenon are not best described as matching, but rather as alike in some respect.

In the series leaf-leaf-lepidopter, you observe three motley, stained expanses. They do not match, and they don't have to match to be alike. Lay one over top of another, and some points roughly correspond. Others do not. Etiology has a role to play here — brown in the wing underside is an adaptive strategy, and so let's say that mutation, adaptation, and selection are the brushes that paint the wing to an extent that, from a certain distance, to a certain eye, it will not be perceived as unlike the leaf's brown. Likeness in this case is a bare minimum.

Figure 1. Kallima Butterfly. Plate II in *Animal Coloration* by Frank Evers Beddard. London, Swan Sonnenschein & co., 1892.

"The lowest possible likeness so as not to be perceived as very unlike by a hungry bird," you could say, for instance. In the leaves, in contrast, brown is more like a failure of adaptation—a nonadaptive, status-quo response to drought, a limited succumbing to the dearth of water in the dry season, a sacrifice of greenery while the tree conserves its life. The leaf brown may be more thorough, less artful, a maximal brown of death, as opposed to the minimal brown of the life adaptation of the butterfly, which is, you could say, an evolutionary decoration, as opposed to the leaf's loss of evolutionary color. To be sure, the mechanisms for producing color are also incompatible in leaf and wing.

All of this is apparent, and yet it shows, when you move further into these sorts of phenomena with an ear for likeness, that the objects, leaf, leaf, and lepidopter, are alike in similar respects and they are alike in unlike ways. From a certain distance, in a certain frame—later it will be given the name "atmosphere"—the three nominally separate items, nymphalid and two leaves, approach each other in color, where they are alike in like respects to a particular depth of analysis. From one distance, "brown" is a point at which the three distinct beings become indistinct. Yet within the colors—brown, brown, brown—there are also undoubtedly subtle and not so subtle unlikenesses across any fraction of any expanse that we call only for the sake of efficiency "brown."

1.1. ***Some likenesses are alike in a like way, and some likenesses are alike in unlike ways.***

That is, the respect in which something is like is not the only determinant of likeness. Likeness also knows manners or ways. Leaves and butterflies are alike in respect of body and, in certain cases, in respect of color, and yet color likeness (respect: brown) and body likeness (respect: leafiness or wingyness or wingyleafiness) do not share a manner. Color, for example, is a likeness in the way it reflects light into the eye of a predator or a scientist. The paper-thinness and specific aerodynamism of wing and leaf are alike in the way they

flutter, say, in a breeze. Another way to say this is that likeness in color respect is relative to predator sight, and likeness in aero shape is relative to physics, specifically, to movement in relation to air. Undoubtedly, you cannot collapse the two frames, being like in view of predator eye and being like in view of lift in air. There are established practices for grouping ways of likeness, such as coloration for predator evasion (the study of mimicry). Other ways are left floating, so to speak, without a science of their own, such as shape or density for physical existence in a gaseous milieu, which would unite leaves, butterflies, sails, flags, and maybe also Wi-Fi and other spirits.

Modifying the original premise in this way leads to another problem. Saying that the ways of likeness are alike and unlike, and sometimes alike in their unlikeness, verges on nonsense. Sense, at a minimum, requires what has sense to be clearly demarcated from other senses. An American philosopher attuned to nonsense, Donald Davidson, once called likeness without further qualifications not exactly nonsensical—or banal or indeterminate—but "trivial," "because everything is like everything, and in endless ways" ("What Metaphors Mean," p. 254). Davidson agrees that not only things, but also the ways of likeness may be alike. His adjective, "trivial," can be added to the others, put alongside "banal" and "nonsense"—even if these characterizations are in some way themselves banal.

Nonetheless, in the intellectual archive in which Davidson and some other philosophers dwell, "being like" has played a pivotal role. Locke and then Hume relied on "resemblance," a slightly different but related term, to explain connections between things previously explained by metaphysical principles. It is no secret that the premise on the likeness of everything is a founding gesture of empiricism. Hume remarks in a footnote to his *Treatise* that all things "admit of infinite resemblances upon the general appearance and comparison, without having any common circumstance the same" (*Treatise*, 1.1.7, note from the 1740 appendix, pp. 18–19). Alone and without the support of commonality or sameness, generalized likeness is a fundamental assumption for empiricist thinking, even if the premise comes into

ill repute with later philosophers in that tradition. Davidson prima facie accepts the likeness foundation of everything and then, without further discussion, dismisses it as trivial. Hilary Putnam, importing reasoning from his teacher Quine, repeats the premise "everything is similar to everything else in infinitely many respects" and after a short discussion he labels it paradoxical and leaves it aside as too limited to explain anything ("Two Philosophical Perspectives," p. 64).

Likeness wants to be understood, if only because without it, the empirical basis of much of our current thinking would turn into a loose, unprincipled gathering of sensations without resemblances by which to assemble them. Hume needs likeness, and yet likeness, as a general principle, seems too vague, too unprincipled, to help very much. It is not like causality or substance, alternative generalities for governing the manifold. Likeness doesn't stick everything together with the same strength as cause or substance, probably because it doesn't structure the world into unambiguously independent individuals with modular parts.

One reason likeness seems almost useless as a principle is its closeness to infinity. In the basic intuition of likeness, your mind travels from one quality to another like quality, and you can discover no natural end to this process. It is a short step from infinity to generality and from there to banality, indifference, indeterminacy, triviality, paradox, and finally, perhaps, in some cases, to foolishness and the loss of reason—to nonsense. True, everything is not like everything in the same way—that would be metaphysics, a return to Parmenides. In Putnam's and Davidson's formulations, on the basis of Hume's intuition, because there is no absolute uniformity, or no access to such, the number of likenesses ratchets up to infinity, which leaves things alike in ways that cannot be easily limited and which at the same time and for the same reason leaves things both so unlike as not to be uniform and not unlike enough to be counted as distinct.

Standing close to uniformity on one side and to chaos on the other, the premise does not convince Davidson or Putnam of its usefulness for philosophizing, although both seem to recognize that an

infinity one iota to the side of uniformity is a logical presupposition of empiricism. Henri Bergson recognizes something similar in 1896 in his critique of associationism: "as, after all, everything resembles everything else, it follows that anything can be associated with anything" (*Matter and Memory*, p. 168). Experience is radically motile for Bergson, and nonetheless, it has more structure and more delimitation than this trivial, general, indeterminate, banal, quasi-uniform or quasi-chaotic mere or bare fact that no one interested in experience, it seems, can accept. Neither can they deny it. As the fact that for Bergson fatally ruins Humean empiricism, and as the fact that after Hume everyone apparently has to confront and, at the same time as they confront it, also have to deny it importance (with a few exceptions), the principle of the likeness of everything has an unprecedented power — the power of total association — and this fact deserves long and deliberate thinking.

Philosophy does not hold the patent on likeness, however. Every mode of knowledge — it is safe to say, I think, every region of being — be it suit-and-tie philosophy or sleeves-rolled-up natural science, whether it happens in the library or the laboratory, or for that matter on the artist's palette or in the pollster's survey — every discourse that tells you what there is and how truth appears is forced to confront the nymph likeness, not just once, but over and over. There's one, a likeness, and one more, a likeness, as unlike as it is alike, as alike as it is unlike.[2] Whatever benefit the proposition "Everything is like everything" may ultimately provide, the intuition of a great proliferation of likenesses cannot easily be avoided. What there is and what we know, who we are and whom we meet, what used to happen and what is likely to, inventories of things and inventions of the future are so thoroughly pervaded by likenesses that questions what and who and why could without hesitation be subsumed under a different question: "What is it like?" and further: "What is it like to be like?"

What is it like to be like? The wager of these sentences is to respond to this nearly tautological, quasi-banal, trivial, and also inescapable question that is useful when it's needed and trivial when it

isn't. Without knowing what it would mean to win the bet, I gamble on a broad redescription of everything in terms of likeness. It's a risk — who would deny it? At any moment, the argument can look nonsensical, skirting the edge of tautology and uselessness, not to mention flaunting its proximity to transcendence. There are reasons for taking the risk. Such a lacuna in our thinking could harm us and all of our knowledges. Indeed, the worry that goes along with likeness is a very old one — "archaic," it might better be called, though it is still with us. What if what we know is only like what is or only like knowledge, merely like or sheerly like, in the sense of "not like," or for that matter "very like," but not "exactly like"?

I ask you to imagine: another layer, a separate plane, a fifth dimension, if you will, a "homeoplex." Believe for a moment that the separate plane, the place of pure likeness unimpeded by beings or causes, is a significant aspect of the real and no less of the imaginary. Concede, provisionally, that the homeotic layer does not just coexist with, but gives rise to the other dimensions — being, thought, image, language, history, sociality both human and animal. The wager is to take "likeness" as the fundamental element of everything, to reverse the conclusion that it is trivial and general and place it at the generative core of not just world history, but cosmic history.

Philosophy, I say, is not the only place to look for fundamental likeness. Other discourses and other regions have better or at least different views on the matter. Poetry, for instance, has its *comme*, its *wie*, its "this is like that"; representational art has its likenesses, its mimetic "this is that"; these theoretical clichés are so familiar that the parameters of likeness can be quite hard to see in discourses in which they are actually essential. In the arts, modes of likeness are so familiar and theoretical chestnuts about them are so abundant that they can be virtually invisible, and further, they are often made to seem like technical problems specific to particular arts. Literary criticism worries over mimesis, art criticism worries over representation, film studies worries over verisimilitude, and so on. Each muse believes likeness is her own personal bane and boon, a technical

problem for it alone. Mnemosyne knows it belongs to each of her children equally. For philosophy, that raises the general question of likeness — likeness appears as the thing that can't be generalized without becoming trivial or banal or empty. And so the one, philosophy, formulates it and loses it,[3] the other, the muses, don't formulate it and have it. If these discourses are invited to reveal their commonalities, the beautiful muses with haggard, ugly philosophy, the hope is that the question of the scope of likeness (of what is like what) and the question of generation (how this comes to be like that) can be addressed. As a preliminary step, look into three regions: what has been called "nature," what has been called "mind," and what stands outside both, a "surnature" that is neither the soul nor god.

One discourse on nature — evolution theory — bets big on likeness. The passage that opens chapter 8 of *On the Origin of Species*, "Mutual Affinities of Organic Beings," acknowledges as much. Darwin writes: "From the first dawn of life, all organic beings are found to resemble each other in descending degrees, so that they can be classed in groups under groups. This classification is evidently not arbitrary like the grouping of the stars in constellations" (p. 303).

The lineup of look-alikes and near look-alikes in evolution theory stretches into the deepest history, and yet, although resemblance marks every living organism, this quality or effect still retains enough specificity or structure so as not to become trivial, for Darwin — so as not to become arbitrary or produce regress.[4] Evolution theory, a playground for homeotics, has a tolerance for likeness as high as its tolerance for complexity. From its obscure origin, the history of life branches out into a tree, or better, a bush, or better, a thicket, whose vines exfoliate a vast forking resemblance system that evolutionists have come to believe also forks back into itself, forming significant tangles in some areas.[5] If evolution talk is something beyond the current hegemonic explanatory mechanism for everything, if the theory's aesthetic whisper can be heard, there comes an echo of its original intuition, one that animates all naturalism beyond mere astonishment at the panoply of nature, the intuition: "This is like that."

To the same degree as we use Darwin's theory in this way, we misuse it. We take an effect and make it a cause, we affirm the consequent, when, for the purposes of demonstration, we make resemblance the pivotal phenomenon. Neither evolution scientists nor philosophers of evolution would validate the theory as homeotic *in se*, but only *pro tanto*, as a means to a scientific end and a symptom of an underlying process. Similarity is considered evidence for a set of probabilistic operations whose result, or whose being, is life.[6] I am neither qualified nor interested to dispute this understanding. I can remark, however, that from an evolutionary point of view, as well as from a homeotic one, similarity may be evidence, but it is also a final cause of evolution processes, insofar as it can be said without reservation that if organisms did not end up similar to one another in multiple ways. there would be no life. There would be no life without final resemblance in two ways. Nothing would be recognizable as life, for evolution science, since species would never arise. And adaptation would be fleeting and, overall, maladaptive, if a niche did not support multiple organisms whose similarities were precisely their adaptive traits.

Is this sine qua non the same kind of condition as other sorts of necessary conditions for life? It may well be a different kind of condition, but it still carries a force that is more than heuristic. Even if a species is defined minimally as a population with gene flow,[7] similarity is more than merely evidence; one could argue that it is the essence of a "population." Take similarity, provisionally, as something more than a surface effect of organisms or species, more than just a "look" of things that opens onto deeper issues; take it as applicable to genetic as well as phenotypic characteristics, to environmental as well as behavioral conditions; let it stand closer to the very structural, operational, semiotic, genetic, environmental, habitual, instinctive operations that permit reproduction in the first place. If you do this, a circle emerges. When similarity is considered evidence, it is evidence for a generative mechanism that leads to similarities. Similarity as evidence leads to similarity as condition for life.

What, then, precedes what, among reproduction, selection, and

similarity? In the case of evolutionary similarity, the proper response to the logical fallacy of affirming the consequent or the ontological error of taking effect as cause is to adjust the logic, and if it is tolerable, abandon, if for a moment, the ontological presuppositions of evolution theory. This Darwin already does in one sense in *On the Origin of Species*. He rejects the idea that a natural living entity, such as a species, has transcendent limits. And, the two chief innovations in the theory, the principle of natural selection and the image of a tree of life, have intimate, if not incestuous relations with the homeotic principle and the homeotic picture. Although he did not go so far as to adjust the logic, I can do that for him, with his help.

It is well known that Darwin deduced the idea of natural selection in part from the practice of artificial selection, the breeding of domesticated animals and cultivated plants, which he read about extensively and also observed in person. *On the Origin of Species* opens with a chapter on artificial selection in which Darwin presents a field of almost unlimited variation (breeds) within partial limits (a species), and a force, in this case, the hand of the breeder, of selection by which variations can be channeled toward this or that phenotype (p. 26). In pursuit of the facts of artificial selection, in late June and early July 1838, Darwin walked the Glen Roy River in Scotland and wrote in a special notebook during the trip, which, although less famous than his Beagle notebooks, is also remarkable. In a letter, he called the article that emerged from the notebook "one of the most difficult & instructive tasks I was ever employed on" (quoted in *Notebooks*, p. 141), though later he took back this sentiment (p. 142). Nonetheless, he carried forward observations from his Glen Roy travels into one of the early evolution notebooks, known now as Notebook D. There, Darwin copied over for a second time an encounter with a breeder. "A Sphepherd [*sic*] of Glen Turret. said he learnt to know lambs, because in their faces they were most like their mothers believes this resemblance general" (note 43, p. 345). The task on this part of the trip was to discover which parent, if any, 'impresses' (note 44, p. 345) the offspring the most in reproduction, the mother or the father.

The test case for this were crossbreeds. If a crossbreed could be shown to carry more traits from a mother or, conversely, more from a father, the causal route of the parents' relative "impressions" could be traced. On one level, Darwin's note records the shepherd's opinion that the mother impresses the offspring more deeply. A slightly later note records a different opinion from another breeder Darwin met along the way: "half breed liable to vary" (note 47e, p. 346). What interests me about the original testimony of the shepherd of Turret, however, is not his answer to the impression question, but rather the suggestion contained in the phrase "believes this resemblance general." This is a critical logical leap — believing the resemblance a general fact — that comes after the intuition "this is like that" in a naturalist's thinking.

1.2. *In natural resemblances, the general phenomenon lies within the specific phenomenon. Everything is in one thing.*

How the general lies within the specific makes the difference between a triviality and a critical principle. It also shows that everything, even if it is permeated by likenesses, has a minimum of order. The shepherd of Glen Turret knew there was a minimum of order among likenesses in the Everything, and this became a crucial thought tool for a new science. Darwin took it up in his notebook, but did not quite draw the conclusion that the shepherd drew, to wit: resemblance means seeing many in one — to a potentially infinite horizon.

Out of his day-to-day practice, the shepherd concluded that "this is like that" makes sense only within a manifold in which everything is like everything in some respect. Without this intuition, the likeness would have to have a ground outside itself, and you would not be able to "see" the mother in the lamb; then likeness would indeed be a minor, trivial, banal ancillary premise in a world operating according to other fundamental principles, such as causality or substance. On the banks of a river in the Scottish Highlands, resemblance was of the essence, and it was also in the essence. Mother, father — it

didn't matter who impressed the most, who was the cause of most of the offspring's salient traits. From the shepherd's vantage point, any single sheep was transparent to its parent, its family, its herd, and ultimately to its kind. A parent is also a transparent. Used to seeing in herds, the shepherd understood how instances let on to other dimensions, how the world "shows through" a being.

1.2.1. ***A single resemblance draws you effortlessly to a milieu of resemblances, from an individual to a family, say, which lets onto a breed, which lets onto a species, which lets onto . . .* X*, making, formally speaking, anything a milieu that lets onto a milieu of milieus. A thing is an* X *of* Xs.

Everyday thinking reaches its limit here, where what seemed to be a triviality takes on the hue of a complex, world-and-discourse-altering truth. Everything reveals its deep strangeness. Not simply an aggregate of individuated things—it is as though the Everything had a twisted shape, as though its outside were inside it and, further, as though the relations among likeness fields, despite the chaos, were both regular and severely lopsided. To be sure, the way a sheep contains all previous sheep and ultimately much of prior organic life in its being is not the same way Mammalia, as a class, contains or subsumes that same sheep. How does the being-in of the generic relation, which implies one kind of regularity among things, relate to the being-in of likeness, which implies another?

Farther on in the same notebook, Darwin tries to come to terms with the shepherd of Glen Turret's theorem under a different rubric. The shepherd's intuition is a tool, but it is also an obstacle in the formal study of natural organisms. When attempting to sort their objects into genera, naturalists confront first and foremost likenesses' multiplicity. This and that, that and those, those and those, and before long, everything altogether can be called alike, in some respects, in some ways. The question that follows from this is: If everything is alike in a respect and a way, and in this manner a single

organism opens up to many others that form its homeotic penumbra, what is the correct principle for selecting some of these likenesses and placing natural entities into groups?

This confusion soon takes a particular shape. It gets turned into a question of rank order. Which likenesses are higher, and which are lower — but this really means which are decisive for classification and which are, as the empiricists will continue to say, trivial? The turn from a confusion into a rank ordering of likenesses at one moment of evolution theory is a critical turning point. Suffice it to say that a major preoccupation for theorists, from here on, will be how to distinguish among the many ways of resemblance and how to apportion value among them.

One thing is clear. There is no room in this schema for degrees of similarity. Even though the opening paragraph of chapter 13 of *Origin* proclaims, "From the first dawn of life, all organic beings are found to resemble each other in descending degrees," this has to be a post-hoc construction, useful for classification, but not justified by natural beings themselves. In the notebook, Darwin argues against the idea that likeness comes in degrees — note 51 deals swiftly with the assumption (p. 348). In the note, Darwin is taking issue with the notion of a "natural arrangement" of animals, which he finds in one account of the fauna of South Africa.[8] He asks critically, what is a "natural arrangement"? The question within his question is, what accounts for the apparent order in nature, and can it be traced back to a real order? Allergic to orders imposed from the outside, Darwin glosses "natural arrangement" as "affinities" among particular organisms.[9] This is the first step toward a sophisticated understanding of likeness. Affinity he then tries to represent as a specific amount of resemblance, but he is forced to contradict this assumption: "affinities, what is that, amount of resemblance — how can we estimate this amount, when ‹value› no scale of value of difference is or can be settled — " (note 51, p. 348). The shepherd of Glen Turret's theorem is raised to a higher level of abstraction here, and the problems it makes for evolution science become sharper. The shepherd turned Darwin's

attention to the staged, multidimensional field of likenesses, turned outside-in in the lamb's face, and yet as Darwin pursues this reasoning further, it turns out that the field has no real distinctions, only, so to speak, real overlaps.

First, Darwin proposes that the order of nature does not lie in an imposed "arrangement," as other naturalists might think, as though nature were a diagram of itself or a big organism that contains all other organisms. The order of nature lies within nature, he insists; it emerges among natural beings, in their affinities with one another, though these affinities are not immediately quantifiable. When you go so far as to say that the naturalness of the field of natural organisms consists in its inner affinities, you are also saying that affinities operate by a different logic than the arrangement of parts in a whole or the synergy of organs within an organism. Nature, a loose, baggy concept, too big to contain anything at the best of times, is stitched together, as it were, through the affinities among creatures, and though the thread of those stitches may be genetic, the pattern of the stitches is resemblance, not causal-functional arrangement. The thought of a general milieu of resemblance internal to the organic field, but of a different order than it, was with Darwin from early on.

To be sure, the thought was with naturalists before him and especially with taxonomists. The most famous in the period before Darwin, Linnaeus, set down the principle that "like always gives birth to like" in the "observations" to the first published edition of *Systema Naturae* in 1735 (§ 4, p. 18). Following this, the basic question about life had these terms: Which comes first, likeness or birth? It isn't so easy to tell from this statement, but in his taxonomic ordering of creatures, one comes to understand that for Linnaeus, likeness is subordinate to the order of birth. This is an attempt to give likeness relations an external origin and structure, guaranteed by the physics and metaphysics of birth. Nevertheless, Linnaeus's phrase captures the centrality of likeness for taxonomy as well as the instinct to bind and tame it under an ontological category. The matter to decide then becomes which likenesses count as birth likenesses and

which count as trivial, banal, tautological, and so forth. Does one investigate this question under the science of birth or the science of likeness, if there could be one? In his notes on artificial selection, Darwin confronts this same question, and he discovers a first element to an answer—that resemblance cannot be measured as if it were a quantity, and thus, if you ban an external schema, you cannot classify organisms by ranking likenesses.

1.3. ***Likeness is not a variable grade or value.***

Say "very like," "like enough," or "like as not." American English assumes likeness has degrees. Surely, the degree of your likeness to your mother is higher than the degree of your likeness to a stone! Then again, it should be admitted that the degree itself has to be relative. In this thought lies the dissolution of the idea that likeness comes in degrees. For the world as we usually think of it, both philosophically and in our normal dealings, that is, as a jumble of existing things belonging to different classes—here a stone, there a cow, here a corner store, there a god—in this abstract perspective, members of a single class appear to exhibit more likeness among themselves than they do to members of another class. Presumably, this is why it has been called a "class." Go back to the mode of likeness, in respect and in manner. The construct "class" is nothing other than a set of traits that have been selected, which we name "respects in which," and a frame or relative reference point, which we name "manner or mode." If the trait is a detail of a phenotype, leaf color, for instance, or height, or what have you, and the mode or manner is "appearance," appearance is relative either to the everyday jumble of things or to a specific other class, a counterclass, with which these certain traits do not find correlatives.

Likenesses are not themselves things, and this means they cannot have magnitude. They are not a material of which there could be less or more, a stuff with intensive or extensive magnitude. Rather, they are triangulations of traits that refer to a certain frame or set of

frames, a double relation, in and through two things, a pair that is in and through a frame or reference point that lends stability to this or that pattern. Darwin's reasoning for this is as follows. It is useless to think of likenesses among organisms as having degrees, because the standard of difference between creatures is relative, given that differences are multiple. Because you cannot say immediately which of all the differences among organisms are the higher ones or the more important ones without imposing an external hierarchy, you also cannot say that one creature is more or less like another. Relative to what? How would you choose which "what" to refer to? To be useful for naturalism, likeness cannot be a magnitude, intensive or otherwise, because magnitudes are relative, and if you reject a theological frame of fixed forms, no relative will have been specified, and for this reason, let us assume that the only consideration possible with regard to resemblance, in a strictly immanent view of nature, is whether it is there or not, among traits, and in what way or relative to what standard.

1.3.1. *Likeness knows no degrees. There cannot be more or less of it.*

Yes, everything is like everything in some respect and in some way, but that does not mean that this is only a little like that, while something else is a lot more like it. This is like that, or else it is like another.[10] Such positivity is a feature of likeness, even if Darwin does not develop this in his thought. Likeness rebuffs lack. Regarding the everyday intuition that likeness can be more and less, when we say, as we do, "She is not very like him," we mean by this that she is "like something else" in some respect, in some frame. Likeness is relative and not rankable. In saying "You are more like your mother," I am saying you are more like your mother than like a stone under specific circumstances, that is, I single out traits in reference to something, which in this case would be a habitual way of classifying some kind of thing, as in the case of mother and stone, in reference to "family." Incidentally, "family" is one frame among many. There are more

modes of resemblance than family resemblances. For certainly you are exactly as much like your mother as like a stone. You need only change the atmosphere. In reference to "physicality," against a background of immaterial things, gods, or future states of affairs, you are like a stone, as is your mother. Stone resemblances, divine resemblances, material resemblances, all resemblances are relative to one situation or another.

Since it can't be measured in degrees, given that there is no absolute frame, the immense field of actual resemblances has to be narrowed down in some other way in order to be useful for evolution theory. In note 51, Darwin tries to work out how resemblance can account immanently for order in nature. At the same time, he avoids making likeness into a general claim or founding, instead of a science of nature, a science of likeness. This he avoids even more assiduously in *Origin*. Although there is no definition of resemblance in the book and no systematic exposition of its laws, the drive to make critical distinctions among kinds of likeness or saliences of traits is written all over the book and leads to endless assumptions without a general theory of how or when to make them. You could almost say that the whole apparatus of heredity, which to Darwin in 1859 remained largely a mystery, gets conjured up in order to avoid too general a field of resemblances and the need to look into it further and more conceptually. If we can't construct a genus on the amount of resemblance among its members, we have to do it on either the kind of resemblance or the importance of the traits. Thus, Darwin constructs a genus in this way: x is like y in t respect, while x is not like z in t respect; thus, we say that x and y compose a genus, and x and z do not. He does not forget that y and z are just as likely to be alike in multiple respects, and yet he somehow fixes the criteria for critical and trivial resemblances at t. He chooses, without looking further into it, a single frame of reference whose choice is undoubtedly motivated by older stories. Darwin's early renown may have rested on his scandalous "will to make similar" simians and humans. And yet it also rests on his will not to make similar other groups, as well as not to

allow simians and humans to coincide in those salient respects that had to distinguish them, whatever they might have been. Everything depended on choosing the right characteristics and the right manner or frame and on ending up with the right kind of likenesses so as not to upend too drastically the order of nature as Darwin inherited it. The appropriate method of the science, the method before the method, was a set of rules about how to distinguish among likenesses. And before method per se, resemblance was elementary.

1.3.2. ***What something is is how and in what respects it is like other things.***

Likeness to your mother and likeness to a stone are, under this experiment, what give meaning to being family and being matter. Give priority to the order of implication over any sort of deduction from first principles. An evolution scientist — perhaps any scientist — begins from likenesses and, through a convoluted process, which includes no small degree of ideology and self-deception, assimilates the likenesses to an ontological schema. In the process, the likenesses go from the absolute center of experience to the margins of a structure, or worse, to its ornaments; where once they lit up in an originary connection, now they serve as evidence for something that never lights up.

The fact that likenesses do not come in degrees makes them a fixed characteristic of beings, more fixed, perhaps, than whatever lies beyond them. Because likeness is not an intensive magnitude, like a quality, of which there can be more or less in an absolute and not relative sense, because it cannot be dialed up or down, it has to be taken as a fixed proportion, which is, in the end, what we mean by "what something is." What something is is the respects and ways in which it is like other things.

Likeness serves as evidence for order in living nature. Darwin makes ontology lean and list, removing several key supports. The scale of being and the identity of substance are no longer there. He sees that likenesses are different than the beings they are said of, different and

constitutive. They are the outside inside, the world imported into the being, crossing it and crossing out its purported independence, emphasizing things' constitutive interrelations through traits and manners.

1.3.3. *Likeness has no properties. It is properties' distribution mechanism.*

If, provisionally, it is better to continue speaking the language of properties, which belongs to the discourse on beings, it is just in order to be able to say that likeness describes how properties disperse across and through things and how properties and things mutually reflect one another such that they never fully individuate.

Darwinian evolution is the story of traits, perhaps more than the story of organisms or species. In Darwin's second epochal concept, the tree of life, the skin of species and the skeleton of organisms fall away, leaving arabesque trails of traits that have lives of their own, with prelives and afterlives. Under this half light, in which creatures live or die, thrive or waste away at the behest of their traits, the principle of individuation comes to seem like an epiphenomenon of likeness, as well as an unfortunate disavowal of it. A pattern of traits extending well beyond them in time, place, and thingness, individuals nonetheless insist on their individuality.

This is another way to present the wager of this experiment. If the shepherd of Glen Turret welcomes a sheep into his herd, it will not be because of that sheep's incomparable self or irreplaceable singularity or individuality or distinct being or essence. It will not be because a virtuality actualized out of a field of pure diversity. It will be because an individual through likeness of traits is already a herd. The herd is in the sheep before the sheep enters the herd.

Some ways to say "likeness" should be handled with caution. Though they are sometimes treated as synonyms, "likeness," "resemblance," and "similarity" often entail different presuppositions. "Similar" is often, though not always, an ontological matter. Similarity

classically obtains between entities in virtue of a third substantial thing outside the relation, be it a gene, a historical antecedent, or a metaphysical substance.[11] I am similar to you in virtue of a reserve of humanity held in common by us both or preceding us in time or held above us as a higher instance. At the same time, "similar" emphasizes the space between things that separates and individuates them, which is what forces us to search above or behind them after the reason for their affinity. In contrast, "resemblance" is usually, though not exclusively, an aesthetic matter. A thing resembles what lends it a look, and the thing that resembles something is a semblance of that thing. This brings into the foreground whatever deficiencies there are in the representation, and in doing so, it, too, reinforces an ontology of individuals. Finally, "likeness"—not equivalent to "similarity" or "resemblance"—has no fixed place in ontology or aesthetics. In the framework of ontology, likeness would probably fall into the category of relation, a category beset by its own difficulties. And yet, as will be shown, likeness does not intervene "between" things, nor is it a special kind of thing that joins other things that are metaphysically or physically separate. Then it is also not a species of reference, as it would be under the aegis of semiotics. When we say *A* is "like" *B*, we are not saying *A* is "about" *B*, as we would if we were pointing out a signifier and a signified. There is something else in play here—a disjointed effect, spooky action at a distance, a noncausal, nonranked affair, one that cannot be measured—"how can we estimate this amount?" Darwin asks (you might think, somewhat desperately).

Likeness is sui generis among modes of existence. Following the shepherd of Glen Turret, I want to say something that appears contradictory at first. Likeness is unique and general at the same time. It is predicated of a lamb with its mother, and a mother with all its parents, and never of a single lamb alone.

1.4. ***Likeness is in and through at least two, and toward these two it holds a thoroughly equitable attitude. It prefers neither one nor the other.***

"In and through two" moves beyond the image of particular, independent, relational beings to the unique overlap that confuses them, where two things appear almost to fuse. The designation "in and through" should be contrasted with "between." Placing a thing beside another thing, predicating of each about the other a "difference from," as for example Hegel does in the *Phenomenology of Spirit* (*Phenomenology*, p. 75; *Phänomenologie*, p. 102), but there are many other examples, as many as there are philosophies — these images will need to be abandoned or at least darkened. A thing is not either "for itself" or "for another" (p. 76; p. 104). Where a thing gets thinghood from likenesses, it does not have the freedom qua thing to act on its own — likenesses act in and through it, fusing it into an indeterminacy with others. A further expression of this: just as you cannot affix an amount or a degree to a likeness, you also cannot say a lamb is like its mother without admitting also that the mother is like its lamb. Reciprocity is one of the main sources of likeness's apparent generality. In our everyday dealings with it, we confuse this reciprocity and this "in and through" others for generality, banality, triviality, or nonsense.

1.4.1. *When we say "This is like that," we mean as well "That is like this" in the relevant respect, though at times in varying ways.*

A likeness cannot travel in one direction without also traveling in the other; the content of the one likeness is the other likeness.[12] Or you can say the likeness is in and through both, and the two are in and through their likeness. Disentangling things from one another becomes complicated or even violating, as does the attribution of qualities, even secondary qualities such as color, so far as they occur in unique combinations and degrees of intensity, which would make a thing seem uniquely itself.

The intertwining of things through likeness presents itself to the naturalist. Darwin's notebooks hint that this is intensely true for the tradition of natural inquiry: the fearful combination of uniqueness

and generality in experiences of likeness offers a promise and a limit to the study of life. The promise of a "natural" connectedness of things and its limit in the confusing nature of that connectedness comes up at two distant ends of the tradition of natural inquiry. Both ends of the tradition, Aristotle in the fourth century BCE and Darwin in the nineteenth century CE, see a potential infinitude of similar points as necessary for science and integral to the whole of living nature, but also at the same time intolerable for science and contradictory among the parts of living nature.

From which perspective on ensouled beings should a study of their anatomy begin? Should it start from individuals, from species, or from the commonalities among species? Until this question is answered, Aristotle's science cannot even get started, since the results will never be credible without a decision on what constitutes the basic unit of study (*Parts of Animals* 1.1). Two possibilities present themselves. Either you take as the basic unit of natural inquiry "each substance alone about itself according to itself" (639a17–18),[13] or you take in its place "attributes common to all according to what is common" (639a18–19), and with this antinomy Aristotle pauses. The crux of the antinomy is the following. Natural science is either the study of individuals, or else it is the study of groups. Within this crux lies another. An individual is an individual in virtue of its membership in a group, or else a group is a group in virtue of what is held in common among its members. To these nested antinomies, Aristotle proposes the following solution: "it is generally likenesses [*homoioteta*] in the shapes of the parts, or of the whole body," that have delimited the genuses (644b8–9). Without likenesses, the antinomies about the basic unit of natural inquiry would be unresolvable. On one hand, without likenesses, there are no individuals, if individuals are thought of as spatiotemporally independent instances of a common substance. On the other hand, there are no groups since natural groups are indeed based on similarities. Groups are replaced by a limitless carpet of deviations, and for this reason, zoological work, as Aristotle conceived it, would be unrelieved tedium. It would never be finished

and therefore could never properly get started. So the science of organisms begins, before it begins, with homeoses. Failing the gift of homeosis, every animal and each part of every animal would have to be derived independently of every other, and before that, each trait of each part, one by one, for the entire field of life. Maybe this is the deepest dream of metaphysics; but it is doubtful whether, on the assumption of the primacy of individuals, without a prior field of likenesses, you could even discern a field of nature. Organisms are alike and species are alike in so many respects that you do and perhaps you must start with common attributes. Yet it is equally doubtful whether, on the assumption of the primacy of groups, you could avoid falling into dogmatism about common attributes. These have to be abstracted from the multitudinous likenesses that transect, almost randomly, the animal field. Shapes (*schemata*) are a common attribute, and yet what allows a science access to shapes are the likenesses among the shapes. To be recognized as a shape, in a part of a body or as a whole body, that part or whole, the shape, needs at least one analog.

1.4.2. *Morphology derives from likenesses.*

A millennias-long obsession with "form" can at last be tempered. Debate the meaning of form, update the ramifications of morphology, return to Aristotle, when you need to, overcome Aristotle, if it seems right. Here, Aristotle himself admits that a shape can be a shape, for ontology, only when it finds echoes across the spectrum. The order form–being–likeness needs to be reversed.

Taking these two related insights seriously—that morphology derives from likeness and the ontology of living things that seems to derive from form in turn derives from likenesses—you discover an esoteric origin within the official beginning. Zoology came about, in this influential inception, from an abbreviation of a much larger field. This is why it has explanatory power; this is what explanation was and remains. Nature, abbreviated, preempts a nearly infinite

homeotic exercise. Even when you explain by abbreviating, the results of the procedure are credible only when you make the following presupposition.

1.4.3. *Likenesses* (homoioteta) *permeate the natural field in a tangle that, in turn, allows likeness points to be selected and renamed, post hoc, "characteristics in common."*

The milieu out of which a scientific procedure can produce an explanatory picture of nature is a tangle, and it proceeds through acts of demarcation that Aristotle calls here, "delimiting the group," or more precisely, "horizoning off the genuses" (*horistai ta gene*, 644b8–9). Before this procedure gets started, before the genuses are cordoned off, however, the tangle has to be active. General attributes on which a category doctrine can be built are precipitates of the process of "horizoning off," and yet these generalities, as Aristotle himself says, are nothing more than higher names for the repetition of like characteristics.

Given its originary position in his natural philosophy, the fact that Aristotle gives no account of homeosis per se is surprising, since the intuition of likenesses had been a feature of Greek reasoning about the world since Homer. What could be more commonsensical than to say: were there no similarities, there would be no science, and also no nature, at least that you could recognize? A complex of similars is taken as a given, a bare fact for thought, and as such, it warrants no philosophizing, even if the science of animals, at its simplest, constructs shapes out of resemblances so that it can perform certain operations on those shapes, such as individuating and then grouping and therefore defining and explaining.

The assumption of a protolikeness tangle moves from the background into the foreground in *On the Origin of Species*, revolutionary book that works against Aristotle's conclusions in several important ways, and still Darwin, as I indicated, concedes in quite a similar manner that the starting point for the study of animate nature is

(continued...)

Index